



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We make Indiana a cleaner, healthier place to live.*

Frank O'Bannon  
Governor

Lori F. Kaplan  
Commissioner

June 9, 2003

100 North Senate Avenue  
P. O. Box 6015  
Indianapolis, Indiana 46206-6015  
(317) 232-8603  
(800) 451-6027  
[www.IN.gov/idem](http://www.IN.gov/idem)

TO: Interested Parties / Applicant

RE: Nucor Fastener 033-17723-00038

FROM: Paul Dubenetzky  
Chief, Permits Branch  
Office of Air Quality

## Notice of Decision - Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures

FNPERAM.wpd 8/21/02

June 9, 2003

Mr. John Harden  
Nucor Fastener  
P. O. Box 6100  
Saint Joe, IN 46785

Re: 033-17723  
Third Notice-only change to  
MSOP 033-11203-00038

Dear Mr. Harden:

Nucor Fastener was issued an MSOP on April 4, 2000 for a stationary nut and bolt manufacturing source. A letter notifying the Office of Air Quality of a modification was received on May 12, 2003. The modification is related to the addition of a new boltmaker to replace an existing boltmaker. There is no increase in potential to emit of pollutants as a result of this modification. According to 326 IAC 2-6.1-6(d)(2), a notice-only change may be used for a modification that involves "a change in descriptive information concerning the source or emission unit or units". Since the change requested meets the above requirement, pursuant to the provisions of 326 IAC 2-6.1-6 the permit is hereby revised as follows (~~strikeout~~ to show deletions and **bold** to show additions):

(1) Section A.2 is changed as follows:

- (m) Twenty-one (21) bolt making machines **including a new National Machine Company model number 1S1**, including coolant and oil lubricate usage, with bolt making machines emissions controlled by three (3) wet venturi scrubbers, capacity: 27.2 tons of steel per hour, total.

(2) Section D.3 is changed as follows:

Emissions Unit Description:

- (m) Twenty-one (21) bolt making machines **including a new National Machine Company model number 1S1**, including coolant and oil lubricate usage, with bolt making machines emissions controlled by three (3) wet venturi scrubbers, capacity: 27.2 tons of steel per hour, total.
- (n) Six (6) nut forming machines, including coolant usage, capacity: 1.27 tons of steel per hour, 30.4 tons of steel per day and 10,000 tons of steel per year, total.
- (o) One (1) tumble blaster, EP61, exhausting to a baghouse, capacity: 1.27 tons of steel per hour, 30.4 tons of steel per day and 10,000 tons of steel per year.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of

this letter and the following revised permit pages to the front of the original permit.

Nucor Fastener  
Saint Joe, Indiana

Page 2 of 2  
Notice-Only Change No.: 033-17723

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Madhurima Moulik, at (800) 451-6027, press 0 and ask for Madhurima Moulik or extension 3-0868, or dial (317) 233-0868

Sincerely,  
Original signed by Paul Dubenetzky

Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Quality

Attachments

mm

cc: File - DeKalb County  
U.S. EPA, Region V  
DeKalb County Health Department  
Northern Regional Office  
Air Compliance Section Inspector - Doyle Houser  
Compliance Data Section - Karen Nowak  
Administrative and Development  
Technical Support and Modeling - Michele Boner

**CONSTRUCTION PERMIT  
and MINOR SOURCE OPERATING PERMIT  
OFFICE OF AIR QUALITY**

**Nucor Fastener  
6730 County Road 60  
Saint Joe, Indiana 46785**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-5.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 033-11203-00038	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: April 4, 2000

First Notice-Only Change No.: 033-13694, issued on April 25, 2001  
Second Notice-Only Change No.: 033-15833, issued on April 24, 2002

Third Notice-Only Change: 033-17723	Pages Affected: 5, 21
Issued by:Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date:June 9, 2003

- (i) One (1) natural gas fired heat treat furnace, including one (1) batch furnace, one (1) hardening furnace and two (2) draw furnaces, total heat input capacity: 7.72 million British thermal units per hour.
- (j) One (1) natural gas fired heat treat furnace, including one (1) batch furnace, two (2) hardening furnaces, replaced 6 (six) new low NOx burners (each burner rated at 0.75 MMBtu/hr) in both of the hardening furnaces, five (5) draw furnaces and two (2) washers, total heat input capacity: 11.15 Million British thermal units per hour.
- (k) One (1) sulfuric acid pickling facility, exhausting to stack EP63, with an acid recovery system, capacity: 32.4 tons of steel per hour and 175,000 tons of steel per year.
- (l) Twenty-one (21) bolt making machines including a new National Machine Company model number 1S1, including coolant and oil lubricate usage, with bolt making machines emissions controlled by three (3) wet venturi scrubbers, total capacity: 27.2 tons of steel per hour.
- (m) Six (6) nut forming machines, including coolant usage, total capacity: 1.27 tons of steel per hour, 30.4 tons of steel per day and 10,000 tons of steel per year.
- (n) One (1) tumble blaster, EP61, exhausting to a baghouse, capacity: 1.27 tons of steel per hour, 30.4 tons of steel per day and 10,000 tons of steel per year.
- (o) Eight (8) bolt and nut formers, using lubricant and cooling oil, equipped with oil mist collection systems, total usage: 37,500 gallons of oil per year. .
- (p) One (1) natural gas fired boiler, identified as EP54, capacity: 8.37 million British thermal units per hour.
- (q) Four (4) hardening and tempering furnace pairs, identified as EP64 through EP67, using pre-wash, quench oil and rust preventative, capacity: 5.8 million British thermal units per hour, each pair.
- (r) Three (3) endothermic gas generators, identified as EP68, capacity: 0.3 million British thermal units per hour, each.
- (s) One (1) wash line, using a maximum of 1,733 gallons of rust preventative per year.
- (t) One (1) wax line, using a maximum of 2,250 gallons of rust preventative per year.

## SECTION D.3

## EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

- (m) Twenty-one (21) bolt making machines, including coolant and oil lubricate usage, with bolt making machines emissions controlled by three (3) wet venturi scrubbers, capacity: 27.2 tons of steel per hour, total.
- (n) Six (6) nut forming machines, including coolant usage, capacity: 1.27 tons of steel per hour, 30.4 tons of steel per day and 10,000 tons of steel per year, total.
- (o) One (1) tumble blaster, EP61, exhausting to a baghouse, capacity: 1.27 tons of steel per hour, 30.4 tons of steel per day and 10,000 tons of steel per year.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

#### D.3.1 Particulate Matter (PM) [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the twenty-one (21) bolt making machines shall not exceed 37.5 pounds per hour when operating at a process weight rate of 27.2 tons per hour.
- (b) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the six (6) nut forming machines shall not exceed 4.81 pounds per hour when operating at a process weight rate of 1.27 tons per hour.
- (c) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the tumble blaster shall not exceed 4.81 pounds per hour when operating at a process weight rate of 1.27 tons per hour.

The pounds per hour limitations were calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where} \quad E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

- (d) The requirement from Condition 5 of CP 033-2787-00038, issued on January 28, 1994, requiring that particulate matter emissions will be considered in compliance with 326 IAC 6-3 provided that visible emissions do not exceed 10% opacity and PM emissions shall be limited to 0.057 grains per actual cubic feet (gr/acf) with the actual gas flow rate of 59,880 actual cubic feet per minute (acfm) for the baghouse collector for the bolt shotblasting operation, is not applicable because, as a result of some shotblasting being removed, the control device is not required in order for the tumble blasting to comply with 326 IAC 6-3-2.

#### D.3.2 Minor Source Operating Permit [326 IAC 2-6]

The requirement from Exemption 033-3780-00022, issued on July 26, 1994, requiring that any change or modification which may increase the allowable emissions to more than 15 pounds per day of VOC

and 25 pounds per day of particulate matter from the equipment covered under the letter (six (6) nut forming machines) must be approved by the Office of Air Management before such change may occur, is not applicable because this is a Minor Source Operating Permit issued under